

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 10-15, 17-22, 47, 59, 63-67, and 76-85 are pending in the application, with claims 10-12, 18, 20 and 47 being the independent claims. Claims 10-12, 18, 20, 47 and 76 have been amended. Claims 78-85 have been added. Claims 16, 56-58, 60-62 and 74-75 have been canceled. Support for the claim amendments may be found in the original claims and throughout the specification. Thus, no new matter is added by way of these amendments, and their entry is respectfully requested.

A request for continued examination (RCE) is being filed concurrently herewith. Therefore, the finality of the Office Action dated October 22, 2004 should be withdrawn, and the amendments and arguments set forth herein should be entered and considered. *See* 37 C.F.R. § 1.114(d).

Based on the above amendments and the following remarks, Applicants respectfully request that the Examiner reconsider and withdraw the outstanding rejections.

I. Claim Rejections Under 35 U.S.C. § 102

A. Tyagi et al.

Claims 10-17, 20-22, 47 and 58-62 were rejected under 35 U.S.C. § 102(e) as being anticipated by Tyagi et al. (U.S. Patent No. 6,150,097) (Office Action, pages 2-4). Claims 16, 58 and 60-62 have been canceled. Thus, the rejection as it applies to these claims is

rendered moot. The claims as amended recite that the oligonucleotides/primers are labeled with a single type of detectable label. In contrast, Tyagi *et al.* teach nucleic acid probes labeled with two types of detectable labels (i.e., a pair of different chromophores). Thus, Tyagi *et al.* do not anticipate the present claims.

Applicants therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e).

B. Nazarenko

Claims 10-22, 47, 56-62, 66, 67, 74 and 75 were rejected under 35 U.S.C. § 102(b) as being anticipated by Nazarenko *et al. Nucl. Acids Res.* **25**:2516-2521 (1997) ("Nazarenko"). (Office Action, pages 4-6.). Claims 16, 56-58, 60-62 and 74-75 have been canceled. Thus, the rejection as it applies to these claims is rendered moot. The claims as amended recite that the oligonucleotides/primers are labeled with a single type of detectable label. In contrast, Nazarenko *et al.* teach nucleic acid probes labeled with two types of detectable labels (i.e., a pair of different chromophores). Thus, Nazarenko does not anticipate the present claims.

Applicants therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(b).

II. Claim Rejections Under 35 U.S.C. § 103(a)

A. Nazarenko *et al.*

Claims 63-65 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nazarenko *et al.* (Office Action, pages 6-9). Applicants respectfully traverse the rejection.

Establishing *prima facie* obviousness requires a showing that each claim element is taught or suggested by the prior art. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Specifically, establishing *prima facie* obviousness requires a showing that some combination of objective teachings in the art and/or knowledge available to one of skill in the art would have led that individual to arrive at the claimed invention. *See In re Fine*, 5 USPQ2d 1596,1598 (Fed. Cir. 1988). Moreover, establishing *prima facie* obviousness requires not only that such a combination of prior art teachings is possible, but also that the teachings would have 1) motivated the skilled artisan to make the combination to arrive at the claimed invention, and 2) suggested to the skilled artisan a reasonable likelihood of success in making and using the claimed invention. *See In re Dow Chem. Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988). Absent a showing of such motivation and suggestion, *prima facie* obviousness is not established. *See Fine*, 5 USPQ2d at 1598.

The present independent claims recite that the oligonucleotides/primers are labeled with a single type of detectable label. Claims 63-65 are multiply dependent on each of these independent claims. Nazarenko *et al.* teach nucleic acid probes labeled with two types of detectable labels (i.e., a pair of different chromophores). Since Nazarenko *et al.* neither teach nor suggest the use of an oligonucleotide or primer labeled with a single type of detectable label, a *prima facie* case of obviousness cannot be maintained.

Applicants therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

B. Tyagi *et al.*

Claims 63-65 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tyagi *et al.* (Office Action, pages 9-11). Applicants respectfully traverse this rejection.

The present independent claims recite that the oligonucleotides/primers are labeled with a single type of detectable label. Claims 63-65 are multiply dependent on each of these independent claims. Tyagi *et al.* teach nucleic acid probes labeled with two types of detectable labels (i.e., a pair of different chromophores). Since Tyagi *et al.* neither teach nor suggest the use of an oligonucleotide or primer labeled with a single type of detectable label, a *prima facie* case of obviousness cannot be maintained.

Applicants therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

C. Nazarenko *et al.* in view of Lee *et al.*

Claims 76 and 77 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nazarenko *et al.* in view of Lee *et al.* (U.S. Patent No. 5,945,526). Applicants respectfully traverse the rejection.

Claims 76 and 77 are dependent on claim 20 which recites that the oligonucleotides are labeled with a single type of detectable label. As discussed above, Nazarenko *et al.* neither teach nor suggest an oligonucleotide having a single type of detectable label. Lee *et al.* do not cure the deficiency in the teaching of Nazarenko *et al.* Thus, a *prima facie* case of obviousness cannot be maintained.

Applicants therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

D. Tyagi et al. in view of Lee et al.

Claims 76 and 77 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tyagi *et al.* in view of Lee *et al.* (U.S. Patent No. 5,945,526). Applicants respectfully traverse the rejection.

Claims 76 and 77 are dependent on claim 20 which recites that the oligonucleotides are labeled with a single type of detectable label. As discussed above, Tyagi *et al.* neither teach nor suggest an oligonucleotide having a single type of detectable label. Lee *et al.* do not cure the deficiency in the teaching of Tyagi *et al.* Thus, a *prima facie* case of obviousness cannot be maintained.

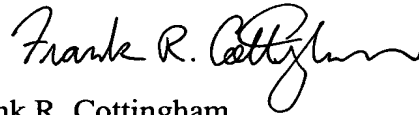
Applicants therefore request reconsideration and withdrawal of the rejection under 35 U.S.C. 103(a).

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Frank R. Cottingham", with a stylized flourish at the end.

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Date: FEB. 22, 2005

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